



UNITED STATES PATENT AND TRADEMARK OFFICE

51
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,033	04/27/2001	Francis Yun Tai Hung	21815	1944

24932 7590 08/20/2004

LAW OFFICE OF LAWRENCE E LAUBSCHER, JR
1160 SPA RD
SUITE 2B
ANNAPOLIS, MD 21403

EXAMINER

LAM, DANIEL K

ART UNIT	PAPER NUMBER
----------	--------------

2667

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/844,033	HUNG ET AL.	
	Examiner	Art Unit	
	Daniel K Lam	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claim 1** is rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Pat. No. 6,424,709 issued to Doyle et al (hereinafter Doyle).

Regarding **claim 1**, Doyle discloses a skill-based automatic call distributor for an Internet based call center (see fig. 5, call processing of email by email handler 70, Internet gateway 72, and col. 12, lines 60-61) comprising:

- Receiving means (see fig. 4, inbound trunks) to receive Internet based inquiries (see Internet call in col. 13, line 10) and to derive from each inquiry of relevant

Art Unit: 2667

information regarding the nature of the inquiry (along with the calls, the ACD 18 in fig. 1 receives information about the calls from the PSTN 16; see col. 2, lines 45-49).

- A look up table in the ACD for storing data respecting skills and availability of agents on duty (see agent name and agent skill matrix in table II of col. 6).
- Means to match available agents having relevant skills with the inquiry and to pass the inquiry to a selected agent (see fig. 4, skills routing module 52, and col. 4, lines 36-38).

3. **Claim 11** is rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Pat. No. 6,636,598 Thomson et al (hereinafter Thomson).

Regarding **claim 11**, Thomson discloses a method of integrating the routing of internet based inquiries with the routing of voice calls to appropriate agents at a call center employing a voice based automatic transaction distribution system comprising:

- Providing an Internet based ACD at the call center (see fig. 1, ATD 2, and col. 3, lines 45-46), the Internet based ACD maintaining a look up table containing agent information respecting skills and availability of the agents (see fig. 2, one or more skill proficiency attributes 70 and availability attribute 72, and col. 5, lines 61-62);
- Providing a switch interface to route both voice calls and Internet inquiries to respective agents based on the skills and availability of the agent (see fig. 1, ATD which interfaces to the switch via path 20 and routes the transaction agent based on skill and availability attributes; see col. 4, lines 42-45).

Art Unit: 2667

- Providing means to remove an agent from a list of available agents when the agent is occupied on either a voice call or an Internet based inquiry (see fig. 2, availability attribute 72, and col. 5, lines 61-62).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 2-10 and 12-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Pat. No. 6,424,709 issued to Doyle et al (hereinafter Doyle) in view of U. S. Pat. No. 6,636,598 Thomson et al (hereinafter Thomson).

Regarding **claim 2**, although Doyle discloses the limitations in claim 1 discussed earlier, he does not disclose having means to place the inquiry on hold in the event that an agent having appropriate skills is not available.

Thomson discloses putting the transaction participants on hold to await a better-qualified agent (see col. 1, lines 36-39) and placing the agents in queue based on availability (see fig. 14, queues and matrices 14, and col. 2, lines 40-45).

Therefore, it would have been obvious to those having ordinary skill in the art, at the time of invention, to have an automatic call distributor for an Internet based call center comprising: receiving means, a look up table in the ACD, means to match available agents having relevant skills, and means to place the inquiry on hold in the event that an

agent having appropriate skills is not available for a key reason. Since a call may be distributed to an agent that is not best qualified or not available, hence, it will be necessary to have means to place the call on hold to await next available best qualified agent to handle the call as taught by Thomson. See col. 1, lines 32-38.

Regarding **claim 3**, in addition to disclose the limitations in claim 2 discussed earlier, Doyle further discloses the Internet based inquiries include non real time voice inquiries, e-mail messages and facsimile transmissions (see fig. 5, FAX handler 68 and email handler 70, and col. 13, lines 4-13).

Regarding **claim 4**, Doyle discloses a switch interface for use in a call center to route voice calls and Internet based inquiries to appropriate agents comprising:

- A voice based automatic call distributor (see fig. 5, ACD 18) to route voice calls to respective agents according to predefined protocols (see fig. 5, voice trunks going into ACD 18).
- An internet based ACD to route internet based inquiries to selected ones of the agents based on agent information stored in tables in the internet based ACD (see fig. 5, email handler 70 and Internet gateway 72).

Furthermore, Thomson discloses:

- Means to designate certain agents as being unavailable when the certain agents are already occupied on a voice call or an Internet based inquiry (see putting the transaction participant on hold in col. 1, lines 35-36).

Regarding **claim 5**, in addition to disclose the limitations in claim 4 discussed earlier, Doyle further discloses having means to receive voice calls via the PSTN and to

Art Unit: 2667

receive internet based inquiries from clients over the Internet (see fig. 5, call processing of email by email handler 70, Internet gateway 72, and col. 12, lines 60-61).

Regarding **claim 6**, in addition to disclose the limitations in claim 5 discussed earlier, Thomson further discloses routing of the voice calls is controlled by a PBX controller in association the voice based ACD (see fig. 1, PBX 6 and ATD 2 are working together, and col. 3, lines 45-51).

Regarding **claim 7**, in addition to disclose the limitations in claim 5 discussed earlier, Doyle further discloses routing of the internet based inquiries is controlled by a skills based router (SBR) in the internet based ACD (see fig. 4, skills routing module 52, and col. 4, lines 36-38).

Regarding **claims 8, 13 and 14**, in addition to disclose the limitations in claims 7 and 11 discussed earlier, Doyle further discloses the PBX controller and the SBR include means to control (claim 8) and monitor (claim 13) the ratio of voice calls and internet based inquiries to the agents; and the ratio of voice based calls to internet based inquiries is variable (claim 14). Using the historical loading data, such as voice or Internet calls, of the agent, the call loading of the agent can be estimated or varied as desired; see col. 3, lines 26-32.

Regarding **claims 9 and 12**, in addition to disclose the limitations in claims 4 and 11 discussed earlier, Doyle further discloses having means for the agents to log on to the voice based ACD and the Internet based ACD (see fig. 1, TERM 13, 15, 17, and 19, fig. 5, Internet gateway 72).

Art Unit: 2667

Regarding **claims 10 and 15**, in addition to disclose the limitations in claims 4 and 11 discussed earlier, Thomson further discloses having means to designate certain agents as available upon completion of a voice call or an internet based inquiry (claim 10) and means to remove an agent from a list of available agents, returns the agent to an available list upon completion of the voice call or internet based inquiry (claim 15). See the availability attribute 72 for each agent in fig. 2, and col. 5, line 62.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel K. Lam whose telephone number is (703) 305-8605. The examiner can normally be reached on Monday-Friday from 8:30 AM to 4:30 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

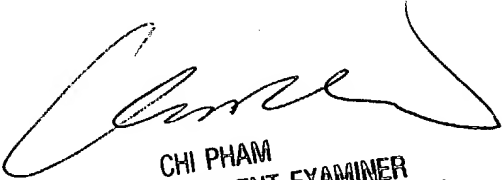
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2667

Status Information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKL *dp*
August 14, 2004


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 8/17/04